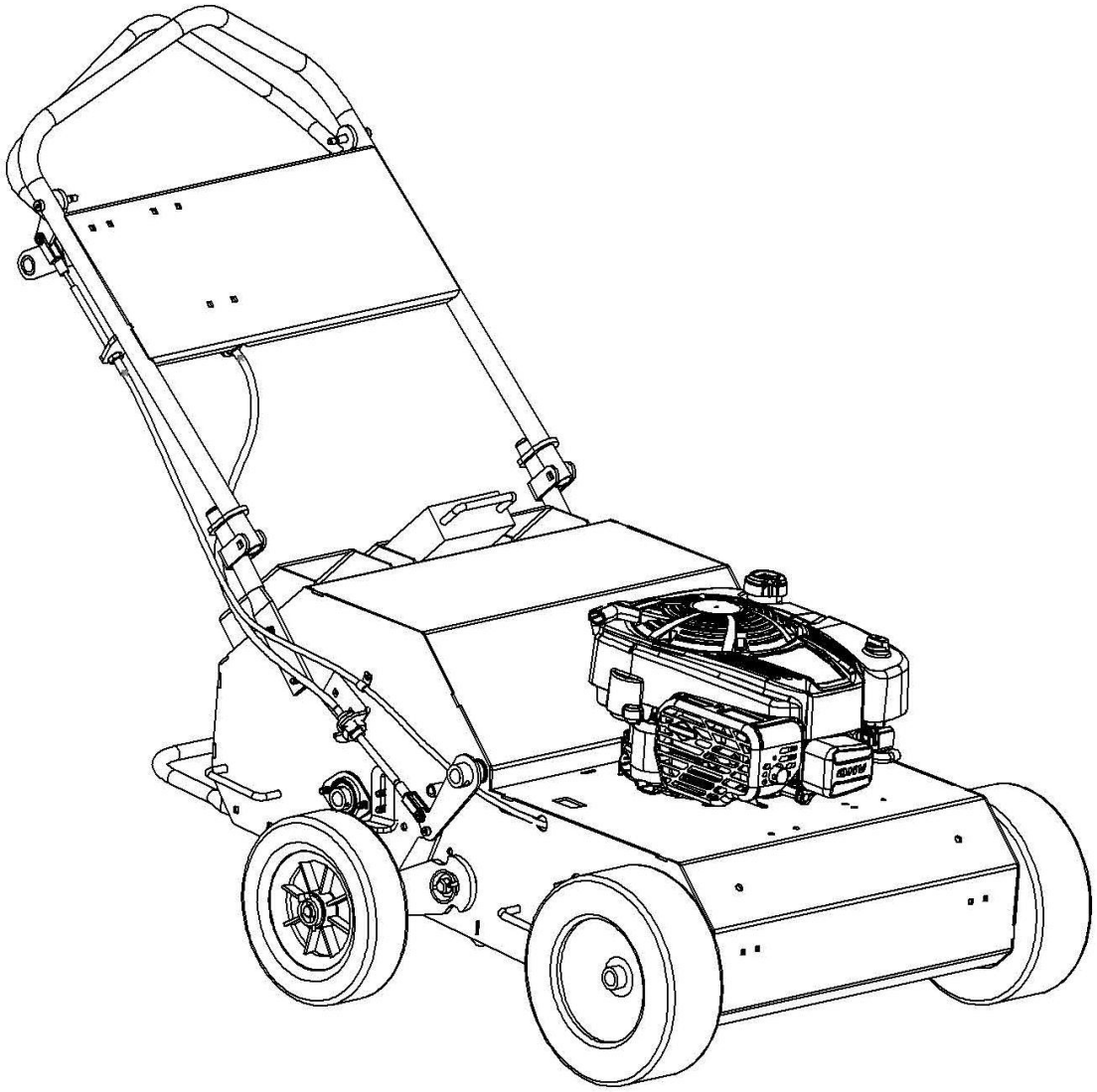
Operator's Manual

Hydro Walk-behind Aerator

Models: TA2106BS_ _
TA2106HO_ _
TA2106SU_ _



Lawn Solutions Commercial Products, Inc.
502-968-3188

TABLE OF CONTENTS

READ THIS MANUAL....3
INTRODUCTION....3
PRODUCT INFORMATION....3
INSTRUCTION LABELS....4
TRAINING & SAFETY....5
ENGINE SAFETY....5
OPERATION....6
CONTROLS....6
BREAK-IN PROCEEDURES....7
MAINTENANCE....7
TROUBLE SHOOTING....8
SERVICE PARTS....9

Introduction

READ THIS MANUAL

Read this manual carefully in its entirety. It contains safety, operating, maintenance, and adjustment procedures for your product. By following the operating and maintenance instructions you will prolong the life of your equipment. Failure to do so could result in personal injury or equipment damage. You are responsible for operating the product properly and safely as well as training

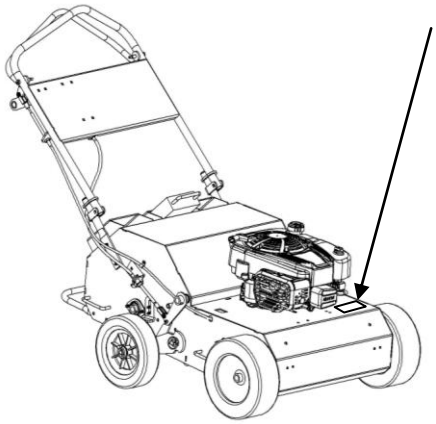
INTRODUCTION

Thank you for purchasing your Lawn Solutions *Hydro* walk-behind aerator. It has been design for years of use for both commercial and rental applications. Take the time to carefully read and understand this manual which provides complete operating and maintenance instructions that will help maintain you unit.

Whenever you need service, parts, or additional information, contact an Authorized Servicing Dealer or Lawn Solutions Customer Service and have the model number for your product available.

PRODUCT INFORMATION

You can find your Model and Serial Number plate here.



Date Purchased_____

Model No._____

Serial No._____

Engine Model No._____

Engine Serial No._____

SAFETY PRECAUTIONS

INSTRUCTION LABELS

The below instruction labels were installed on you aerator. If they become damaged replace them prior to using this piece of equipment.

Label Control Panel
PN – LS0375

Label Moving Parts
PN- LS0376

Label Tines
PN- LS0377

CAUTION! Serious bodily injury may result from failure to follow safe operator procedure.
Read operators manual before operating this machine.
Clear area of debris before aerating.
Do not operate without chain covers or safety devices.
Keep people and pets a safe distance away from machine.
Do not add fuel while engine is running or hot.
Use caution on slopes.
Wait for all moving parts to stop before leaving operators position.
Never allow children to operate machine.
Alway wear safety glasses, pants, shoes.
Never run engine indoors or without adequate ventilation.

Label Caution
PN- LS0378

TRAINING & SAFETY

1. Like all powered equipment, reasonable care must be used when operating this machine.
2. It is the **owner's** responsibility to ensure each user is properly trained on how to **safely** operate and use this piece of equipment.
3. Read the instructions carefully and understand how to use the controls.
4. Avoid operating this equipment around bystanders especially children and animals.
5. Make sure you understand how to stop the aerator at any time.
6. The use of personal protective equipment, such as (but not limited to) protection for the eyes, ears, feet, and head is recommended.
7. While operating, always wear substantial footwear and long trousers. Do not operate this equipment while barefoot or with sandals.
8. The work area should be free of obstacles and debris
9. Mark all utilities prior to operating this equipment. The tines will extend down up to 4" into the ground possibly contacting phone lines, cable TV line, dog fences wires, etc…

ENGINE SAFETY

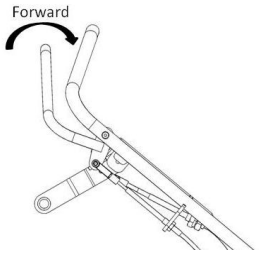
1. DO NOT refuel this equipment while the engine is running.
2. DO NOT refuel this equipment while the engine is hot.
3. If you spill fuel during refueling, clean up the excess fuel, move the unit to another location while waiting for the remainder of the fuel to evaporate prior to starting.
4. DO NOT smoke while filling the gas tank.
5. Do NOT run the engine in an enclosed area.
6. DO NOT touch the muffler, engine, and cooling fins when hot.
7. DO NOT leave the unit running while unattended.
8. DO NOT over rev the engine. The maximum RPMs for the engine is:
    - Briggs & Stratton 3,600 RPMs
    - Subaru – 3,600 RPMs
    - Honda – 3,000 RPMs
9. DO NOT operate with grass, leaves, or other combustible materials near the muffler.

OPERATION

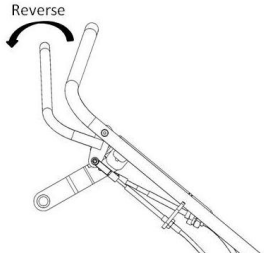
1. Read and understand the safety labels on the unit.
2. Understand how to work the controls. Practice maneuvering in an open area.
3. When starting, keep feet away from tines and moving parts.
4. Never leave the unit running while unattended.
5. NEVER allow children to operate this piece of equipment.
6. Use caution while operating on slopes.
7. Raise the tines when crossing hard surfaces like concrete or asphalt.
8. Stop the engine and disconnect the spark plug wire before doing any maintenance on the unit.

CONTROLS

1. Press forward on the control handle to move forward. The unit is variable speed…the more you push on the control the faster it will go.



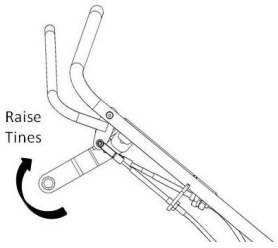
2. Pull back on the control handle to move backwards…the more you pull the faster it will go.



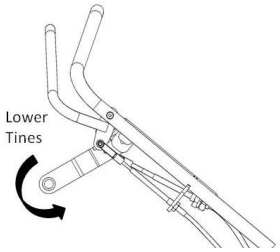
3. To turn:
   - While moving slowing
   - Press down on the handles
   - Turn to the right or left
   - Increase speed after the turn

4. The aerator will aerator in both forward and reverse for ease of use in tight area. Keep feet clear of tines while operating.

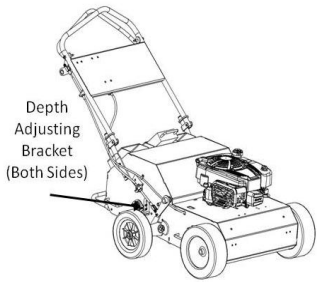
5. To raise the tines, lift up on the black lift handle until they lock in the up positions.



6. To lower the tine, press down on the black lift handle and they will lower. Keep feet clear of unit when lowering.



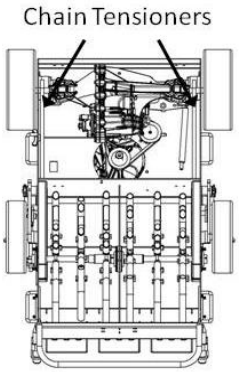
7. The depth of the tines are adjustable on each side. The recommended depth is 2.5" for ease of use (center bracket).



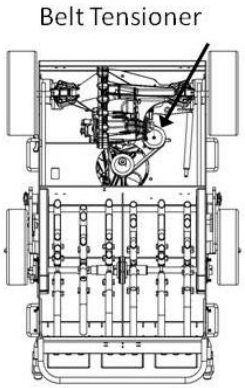
8. The engine throttle is used to govern the maximum speed of the unit. It is normal to operate the unit at the lowest RPM setting.

BREAK-IN PROCEEDURES

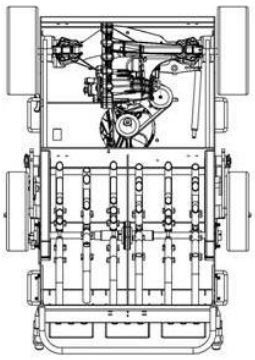
1. After the first 10-20 hours check the drive chains for proper tension. New chains will stretch in the first few hours of use. If you can hear them flopping around inside the chain covers they are too loose.



2. After the first 25-50 hours check the drive belt to the hydrostatic pump for tension. New belts will stretch during the first few hours of use.



MAINTENANCE



1. **Cleaning – tip unit back for cleaning. NOTE: tipping the unit forward can flood the engine with fuel and oil.**

2. Before each days use:
    a. Check the engine air filter
    b. Lubricate the chains and 2 grease fittings on the floating tines (center tines).
    c. Inspect the chain tension when lubricating. Chains should not flop around during use.

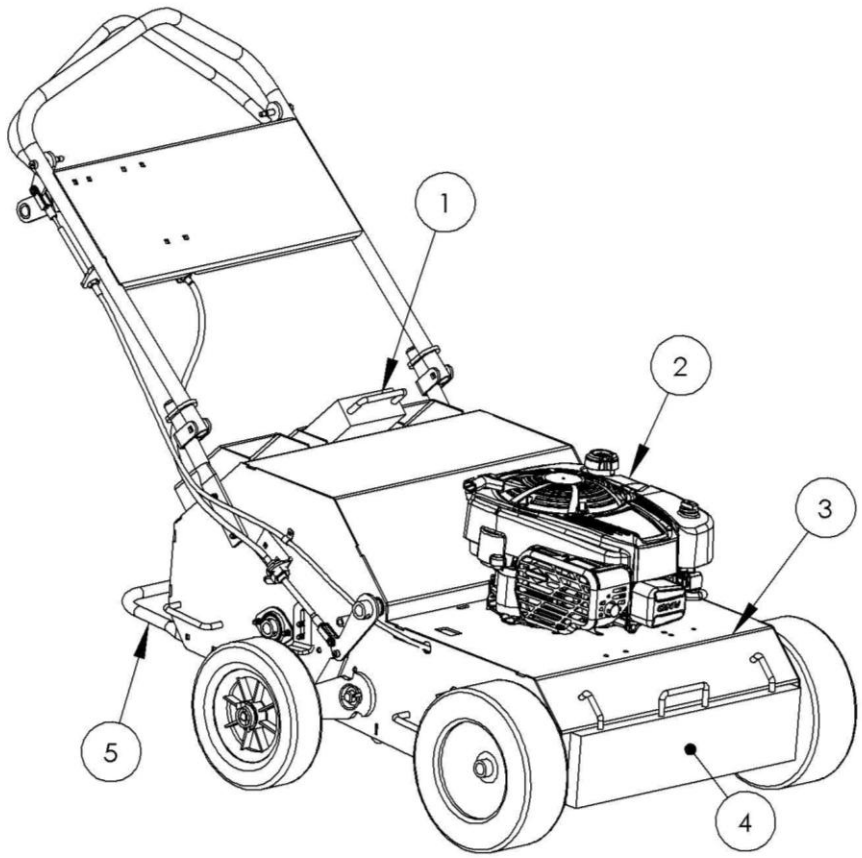
3. Every 100 hours
    a. Replace the engine air filter
    b. Change the engine oil
    c. Check and adjust chain tension if needed.

Trouble Shooting

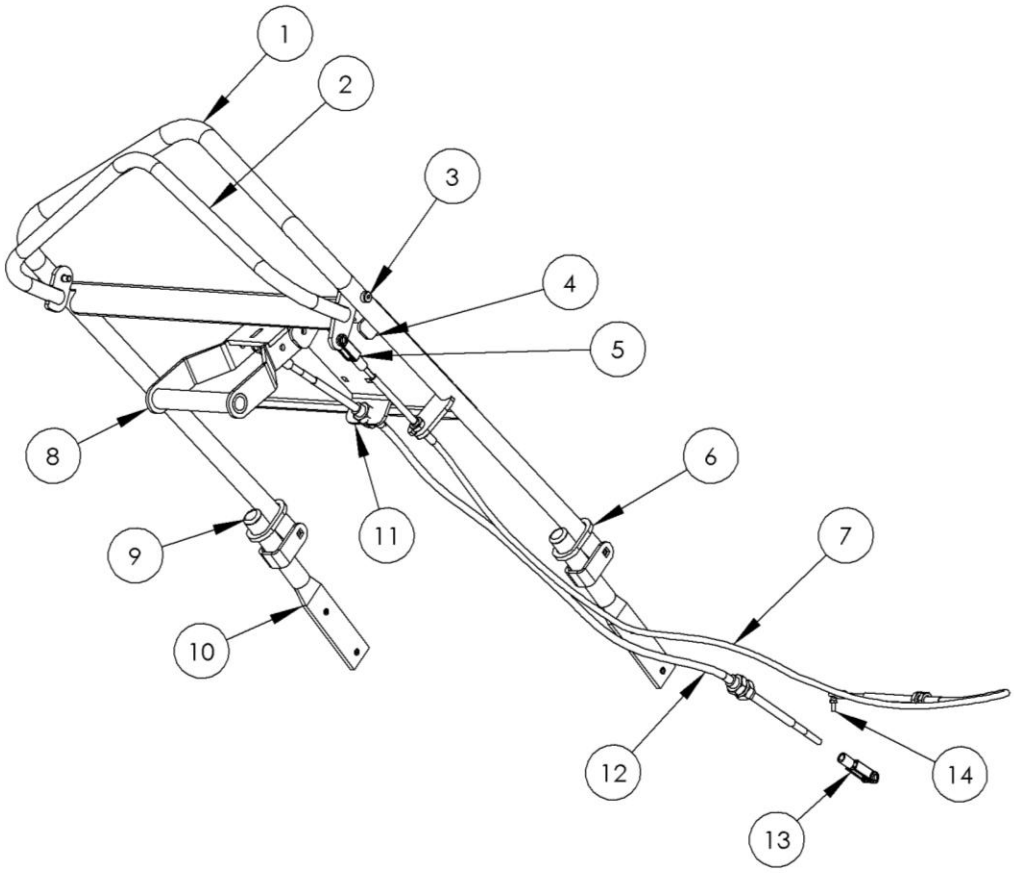
TROUBLE SHOOTING

Problem	Possible Cause	Solutions
Engine will not start	Engine Turned off at the engine	Locate on/off switch and turn it on
	Spark plug disconnected	Check spark plug
	Fuel Turned off for transporting	Turn on fuel on the engine
Abnormal vibrations	Loose or missing bolts; broken parts.	Stop work immediately! Replace many broken or missing parts.
Unit will not pull itself up hills	Drive belt to hydrostatic pump is loose	Turn off engine, disconnect spark plug; tip unit back and inspect belt; tighten if needed
Front wheels move but tines do not.	Chain or drive sprocket is broken	Replace chain or drive sprocket.
Engine smokes when starting	Engine was tipped forward allowing engine oil into the carburetor.	Tip unit back on end when doing any service or cleaning.
Engine hard to start after transporting	Engine is flooded due to bouncing while transporting.	Turn off fuel during transport.

SERVICE PARTS

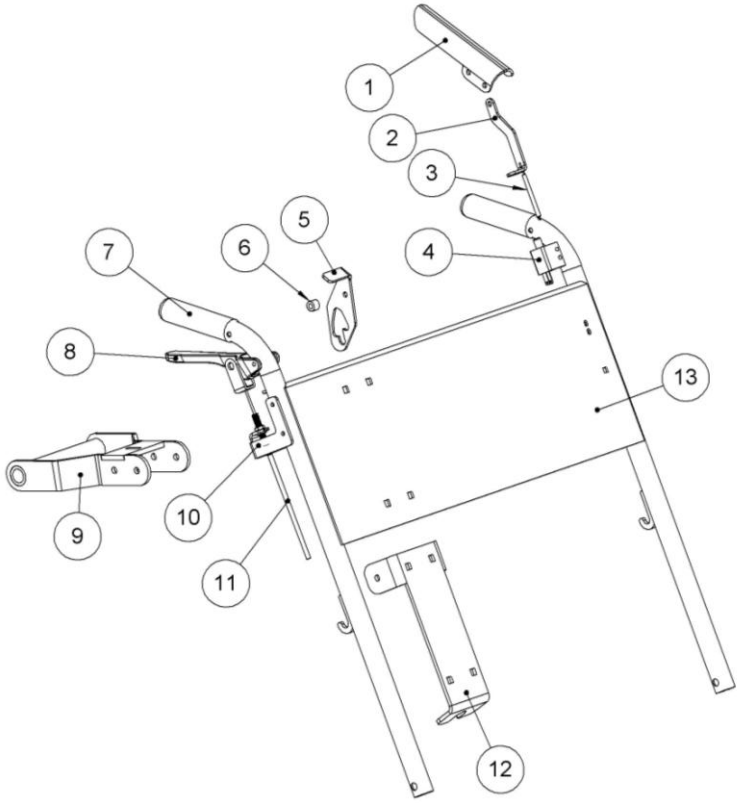


Item	Part Number	Description
1	LS0302	Rear Weight
2	LS0311	Engine (Briggs Pro 190cc)
	LS0311a	Engine (Honda GXV160; 160cc)
	LS0311b	Engine (Subaru 190cc)
3	LS0306	Frame
4	LS0301	Front Weight (Optional; used when adding 2nd or 3rd rear weight.
5	LS0374	Foot Guard

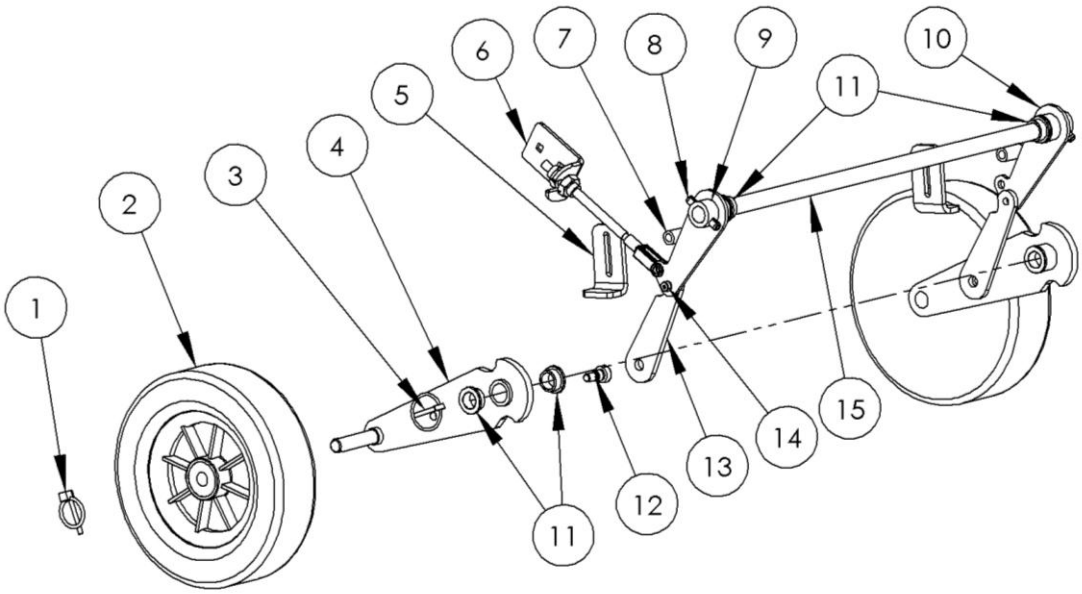


Item	Part Number	Description
1	LS0360	Handle ASM
2	LS0361	Traction Control
3	LS0362	Shoulder Bolt 3/8"-1.25"
4	LS0363	Reverse Stop
5	LS0364	Yoke (for trans cable)
6	LS0202	Handle Ring
7	LS0365	Transmission Cable
8	LS0371	Lift Handle
9	LS0204	Plastic Plug 1"
10	LS0369	Handle Extension
11	LS0370	Lift Cable Bracket
12	LS0367	Lift Cable
13	LS0368	Yoke (for lift cable)
14	LS0366	Swivel (for trans cable)

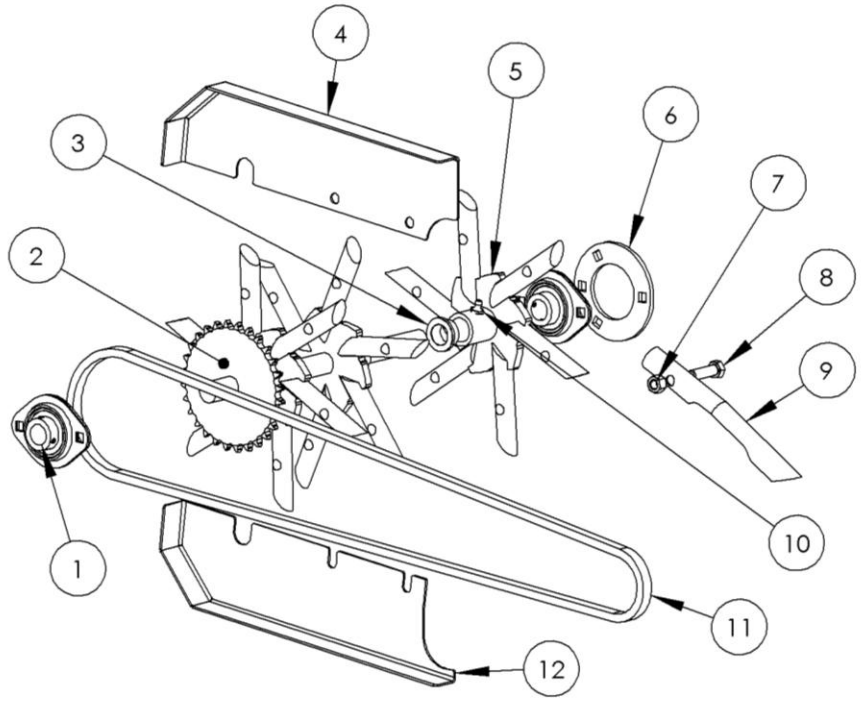
Handle ASM for Model (TA2160BSC1)



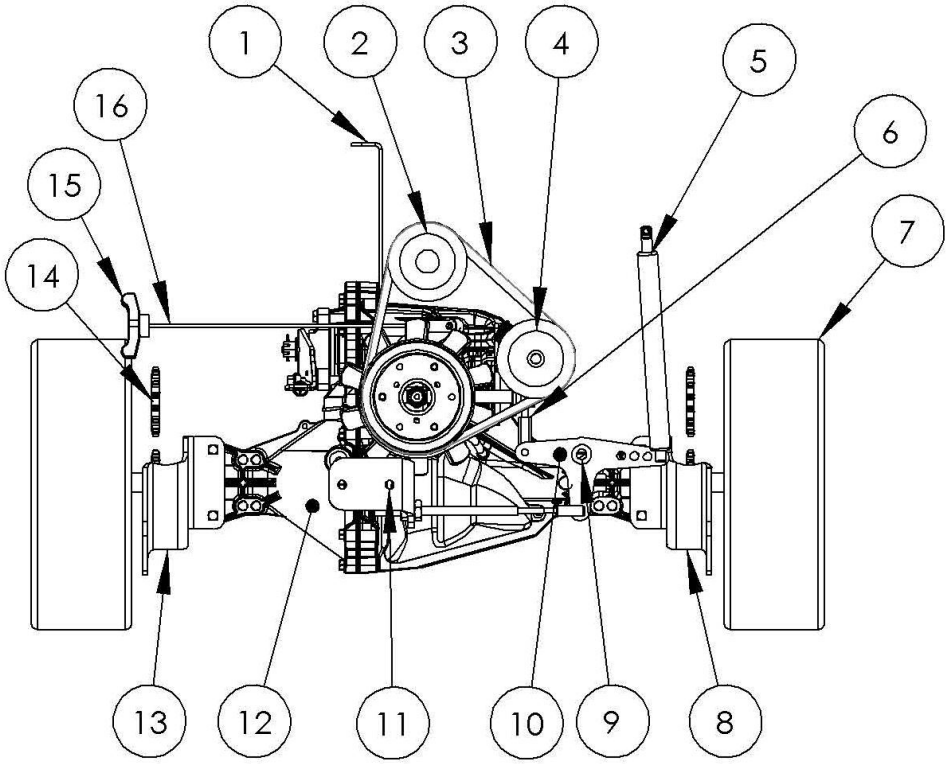
Item	Part Number	Description
1	LS0156	OP Handle
2	LS0156a	OP Linkage
3	LS0160	OP Spring
4	LS0157	OP Switch
5	LS0021	Neutral Lock
6	LS0023	Spacer (Nylon / Black)
7	LS0022	Hand Grip
8	LS0025	Traction Control Lever
9	LS0371	Lift Handle
10	LS0033	Transmission Cable Bracket
11	LS0365a	Transmission Cable
12	LS0370	Lift Cable Bracket
13	LS0361a	Handle ASM



Item	Part Number	Description
1	LS0260	Lynch Pin 3/16"
2	LS0287	10" Wheel ASM
3	LS0307	Lynch Pin 1/4"
4	LS0308	Trail Arm ASM
5	LS0309	Depth Stop
6	LS0310	Cable Bracket
7	LS0220	Toggle Stop
8	LS0312	Spring Pin 3/8"-2"
9	LS0313	Upper Pivot Bracket (Right Side)
10	LS0314	Upper Pivot Bracket (Left Side)
11	LS0056	Bronze Bushing 3/4"
12	LS0318	Shoulder Bolt 1/2"- 3/8"
13	LS0317	Lower Pivot Bracket
14	LS0316	Shoulder Bolt 3/8" - 1/4"
15	LS0315	Pivot Shaft



Item	Part Number	Description
1	LS0005a	Bearing 3/4"
	LS0076	Bearing Flange
2	LS0320	Drive Tine ASM (Right Side)
	LS0319	Drive Tine ASM (Left Side)
3	LS0321	Bronze Bushing 3/4"
4	LS0323	Upper Chain Cover (Right)
	LS0322	Upper Chain Cover (Left)
5	LS0325	Float Tine ASM (Right)
	LS0324	Float Tine ASM (Left)
6	LS0326	Bearing Spacer
7	LS0327	3/8" Rev Nut
8	LS0328	Bolt 3/8"-1.25" Grade 5
9	LS0329	Single Tine
10	LS0334	Grease Zerk
11	LS0330	Single Roller Chain (Full Length)
	LS0331	Single Master Link
12	LS0333	Lower Chain Cover (Right)
	LS0332	Lower Chain Cover (Left)



Item	Part Number	Description
1	LS0335	Trans Torque Bracket
2	LS0336	Engine Pulley (4"-7/8" Bore)
	LS0337	Engine Pulley (4.25" - 1" Bore)
3	LS0224	Transmission Belt
4	LS0340	Idler Pulley
5	LS0342	Dampener
6	LS0343	Swivel Link
7	LS0045	11" Wheel ASM
8	LS0341	Left Trans Mount
9	LS0344	Shoulder Bolt 3/8"-2"
10	LS00345	Pivot Control Arm
11	LS0346	Trans Cable Bracket
12	LS0347	Transmission ASM
13	LS0341a	Right Trans Mount
14	LS0348	Idler Sprocket
15	LS0049	T-Knob
16	LS0339	Dump Cable